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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,226	09/30/2003	Bruce B. Roesner	16165-004001	7655
20985	7590	07/15/2005	EXAMINER	
FISH & RICHARDSON, PC			TRIEU, VAN THANH	
12390 EL CAMINO REAL			ART UNIT	PAPER NUMBER
SAN DIEGO, CA 92130-2081			2636	

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,226

Applicant(s)

ROESNER, BRUCE B.

Examiner

Van T Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 2, 4-8 and 11-24 are rejected under 35 U.S.C. 102(b) as being anticipated by **Hum et al** [US 6,714,133].

Regarding claim 1, the claimed first and second conductive paths for receiving sensing signals from the one or more RFID sensing transceiver (the interrogator/reader 156 or 202 connected to a plurality of pairs of conductive wires 14a to 14n or 160a to 160k, that includes connectors 15 or 161 for directly connection to each of the RFID transponders 18, 25 or 210a to 210n to receive ID code and information data from each of the transponders/RFID, see Figs. 4A, 4B and 5, col. 4, lines 30-33 col. 10, lines 1-47, col. 11, lines 59-67 and col. 12, lines 1-16); and the controller for providing a carrier signal on the first and second conductive paths, and for receiving the signals form the first and second conductive paths (the microcontroller 2, see Figs. 1, 3, 4A, 4B and 5, col. 1, lines 65-67, col. 3, lines 1-8 and 42-53, col. 3, lines 51-65 and col. 10, lines 1-47).

Regarding claim 2, the claimed first and second conductive paths are substantially parallel to each other, see Fig. 5.

Regarding claim 4, the claimed having logic for resolving an output based on the sensing signals received from the RFID sensing transceiver (the microcontroller 2, see Figs. 1 and 3, col. 3, lines 63-65, col. 4, lines 1-29 and col. 7, lines 41-67).

Regarding claim 5, the claimed sensing signals are capacitive-coupled from the RFID sensing transceivers to the first and second conductive paths, which reads upon the communication lines 14a to 14n includes pairs of conductive wires and coupling ports, which is in the form of coil or capacitor designed to behave like an inductor, see Fig. 1, col. 3, lines 53-60 and col. 4, lines 44-60.

Regarding claim 6, the claimed RFID sensing transceivers generates the sensing signals based on a stimulus perceived by the RFID sensing transceivers (the RFID transponders received sensed signals from the sensor 33, see Figs. 2B and 4A, col. 7, lines 19-40 and col. 10, lines 51-58).

Regarding claim 7, all the claimed subject matters are cited in respect to claim 6 above, see col. 11, lines 2-11.

Regarding claim 8, all the claimed subject matters are cited in respect to claims 1 and 5 above, see Figs. 1, 4A, 4B and 5.

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Regarding claim 11, all the claimed subject matters are cited in respect to claims 5, 6 and 8 above.

Regarding claim 12, all the claimed subject matters are cited in respect to claims 1, 2 and 11 above.

Regarding claim 13, all the claimed subject matters are cited in respect to claims 7 and 11 above.

Regarding claim 14, all the claimed subject matters are cited in respect to claims 2 and 8 above.

Regarding claim 15, the method claimed limitations are met by the apparatus claims 1, 5 and 6 above.

Regarding claim 16, all the claimed subject matters are cited in respect to claims 5 and 15 above.

Regarding claim 17, all the claimed subject matters are cited in respect to claims 1 and 15 above.

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Regarding claim 18, the claimed providing a carrier signal to the conductor and transmitting the sensing signal on the carrier signal (each of the RFID transponders 25 and/or 210a-210n transmitter 27 for transmitting of sensed signal over the RF carrier signal to the reader 156 or 202, see Figs. 2B, 3A 4A, 4B and 5, col. 4, lines 44-52, col. 5, lines 33-55).

Regarding claim 19, the claimed carrier signal includes a frequency between 50 and 100 MHz, see col. 6, lines 33-35.

Regarding claim 20, all the claimed subject matters are cited in respect to claims 1 and 5 above.

Regarding claim 21, the claimed RFID chip attachment module and an IC chip comprising the sensor, and the conductors are located in proximity to the RFID chip attachment modules, see Figs. 1, 2B, 4A, 4B and 5, see col. 6, lines 56-67 and col. 7, lines 1-40.

Regarding claim 22, all the claimed subject matters are cited in respect to claims 1 and 21 above, see Figs. 1, 4A, 4B and 5.

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Regarding claim 23, the claimed first and second conductive leads to allow RF transmissions with at least one external reader (the output devices 8, 9, col. 3, lines 51-67 and col. 4, lines 1-43).

Regarding claim 24, all the claimed subject matters are cited in respect to claims 21 and 22 above.

2. Claims 3, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hum et al** in view of **Kayser et al** [US 6,266,052].

Regarding claim 3, **Hum et al** fails to disclose the controller includes an oscillator for providing an AC signal to the carrier signal. However, **Hum et al** teaches that the interrogator/reader 12, 156 or 202 provides two-way communications with each of the RFID transponders 18, 25 or 210 via an RF short-range wireless and pairs of conductive elements 14 or 160. The interrogator/reader generates radiating an interrogating field of RF over a predetermined distance, carrying energy associated with the interrogation field along at least one respective conductive elements 4 or 160. The range of the electromagnetic fields generated by such interrogators is vary from 125 kHz, 13.5 MHz, 433 MHz or other frequencies, see Figs. 1, 2, 4A, 4B, col. 2, lines 20-34, col. 3, lines 63-67, col. 4, lines 1-5 and col. 6, lines 20-65. **Kayser et al** suggests that a plurality of display tags 20 is disposed between two conductors C1, C2. Each of the area controller 31 includes a microprocessor 82 to generate an information signal for modulating an AC power signal supplied to the selected conductor C so that the

information signal will be conveyed to the desired display tag 20 by a nominal frequency of the power signal carried by each of the conductors C1-Cn is 50 KHz. An oscillator 147 to provide the operating clock signal for both the UART 144 and the CPU 146. The oscillator cycles are of the rectified main primary frequency of 50 KHz to 100 KHz wave, see Figs. 2, 4, 6 and 7, col. 4, lines 56-67, col. 5, lines 1-40, col. 6, lines 50-62, col. 8, lines 60-67 and col. 9, lines 1-12. Therefore, it would have been obvious to one skill in the art at the time the invention was made to substitute the modulating AC signal of **Kayser et al** for the interrogation signals of **Hum et al** since both systems are designed to provide electrical power and data signal to each of the RFID transponders or display tags over the two conductive elements.

Regarding claim 9, all the claimed subject matters are discussed between **Hum et al** and **Kayer et al** in respect to claims 3 and 8 above.

Regarding claim 10, all the claimed subject matters are discussed between **Hum et al** and **Kayser et al** in respect to claims 3 and 9 above.

Response to Arguments

3. Applicant's arguments filed on 21 April 2005 have been fully considered but they are not persuasive. Because of the Response and the update search, the two references of **Hum et al** and **Kayser et al** are introduced to make the rejection smoother.

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Conclusion

4. Examiner is very regrettably to have a new ground of rejection based on the update search.

5. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (571) 272-2981.

A handwritten signature in black ink, appearing to read 'Van Trieu', with a long horizontal flourish extending to the right.

Van Trieu
Primary Examiner
Date: 7/13/05